Indian Institute of Technology, Kanpur

Proposal for a New Course

1. Course No: DES6XX

2. Course Title: InforMotion Design: Information Visualisation & Storytelling

3. Per Week Lectures: 1 (L), 0 (T), 6 (P), 0 (A)
Credits (3 + 0 + 6 + 0): 9 Duration of Course: Full Semester

4. Proposing Department/IDP: Department of Design

Other Departments/IDPs which may be interested:

5. Proposing Instructor(s): Nilutpal Borgohain

6. Course Description:

A) Objectives

1. To build a foundational understanding of data, information and visualisation, and of how quantitative and qualitative information complement each other.
2. To develop the ability to interpret datasets and qualitative material (interviews, observations, images and documents), and to integrate evidence from these sources.
3. To enable students to select and design visual representations and narratives, including time-based and motion forms, suited to the audience and purpose.
4. To encourage critical reflection on bias, uncertainty, accessibility and ethics in representing information.

B) Contents

S. No.	Broad Title	Topics	No. of Lectures
1	Introduction	Data vs information vs insight; scope of information design; quantitative, qualitative and mixed information sources; examples from everyday life, media and design.	1
2	Working with Information: Quantitative, Qualitative and Mixed	Reading datasets critically (data types, cleaning, categorising, basic descriptive statistics, bias); working with interviews, observations, images and documents (basic qualitative coding, identifying patterns and developing themes); integrating quantitative and qualitative evidence, comparing evidence across different sources.	3
3	Visual Representation	Visual perception and visual variables; chart selection; diagrams, maps, timelines, networks; visual representations of qualitative findings; visual accuracy and integrity.	2

4	Data Storytelling	Audience and purpose; from pattern to insight; narrative sequence, annotation, metaphor and visual rhetoric.	2
5	Motion and Time-Based Visualisation	Representing time, sequence, and change; timing, easing and sequencing; animated charts, maps and diagrams; kinetic typography; when motion helps and when a static form works better.	3
6	Accuracy, Ethics and Accessibility	Uncertainty, bias and framing; consent and anonymisation; accessibility, including alternatives to animation.	1
7	Studio Integration and Critique	Project development, critique and presentation of the final information-design project.	2
	Total lectures		14

C) Pre-requisites:

Familiarity with digital design tools and design fundamentals, such as typography, colour theory, and layout, is desirable.

D) Short Summary for Course Booklet

This course explores how quantitative, qualitative and mixed information can be interpreted and communicated through visual design, storytelling and motion. Students learn to read data critically, analyse qualitative material, identify patterns and insights, and select appropriate forms of information visualisation. Through weekly studio practice, students apply principles of visual representation, narrative, and motion to communicate relationships, meaning and change. The course emphasises audience, context, accessibility and responsible representation, culminating in a final project that may take the form of a static, interactive or time-based information experience.

7. Recommended Books

Textbooks

- Cairo, A. (2016). The Truthful Art: Data, Charts, and Maps for Communication. New Riders.
- Knaflic, C. N. (2015). Storytelling with Data: A Data Visualization Guide for Business Professionals. Wiley.
- Schwabish, J. A. (2021). Better Data Visualizations: A Guide for Scholars, Researchers, and Wonks. Columbia University Press.

Reference Books

- Cairo, A. (2012). The Functional Art: An Introduction to Information Graphics and Visualization. New Riders.

- Creswell, J. W., & Plano Clark, V. L. (2018). Designing and Conducting Mixed Methods Research (3rd ed.). SAGE Publications. (selected sections)
- Crook, I., & Beare, P. (2015). Motion Graphics: Principles and Practices from the Ground Up. Fairchild Books.
- D'Ignazio, C., & Klein, L. F. (2020). Data Feminism. MIT Press.
- Drucker, J. (2014). Graphesis: Visual Forms of Knowledge Production. Harvard University Press.
- Jacobson, R. (Ed.). (2000). *Information Design*. MIT Press.
- Lupi, G., & Posavec, S. (2016). Dear Data. Princeton Architectural Press.
- Stone, R. B., & Wahlin, L. (Eds.). (2018). The Theory and Practice of Motion Design: Critical Perspectives and Professional Practice. Routledge.
- Tufte, E. R. (2001). The Visual Display of Quantitative Information (2nd ed.). Graphics Press.

8. Any other remarks

The studio hours combine project work with guided practice using graphics and motion-design tools, such as Illustrator, Cavalry, Blender and After Effects, introduced progressively through the semester. Assessment is based on assignments, studio practice and a final project that may draw on quantitative, qualitative or mixed information. Quantitative analysis is limited to foundational data literacy and descriptive methods; advanced statistics and programming are not prerequisites. Any interviews or observations involving participants must be conducted with appropriate consent, and personal information should be anonymised where appropriate.

Dated: 26 Oct, 2026 Proposer: Nilutpal Borgohain

Dated:_____ DUGC/DPGC Convener:_____

The course is approved / not approved

Chairman, SUGC/SPGC

Dated:_____